

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,350	12/21/2001	Noriaki Nishi	SON-2552/KOI	3695

7590 09/27/2004

Rader Fishman & Grauer
1233 20th Street NW Suite 501
Washington, DC 20036

EXAMINER

PATEL, GAUTAM

ART UNIT	PAPER NUMBER
----------	--------------

2655

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/914,350	NISHI, NORIAKI	
	Examiner	Art Unit	
	Gautam R. Patel	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,5,9,12-15,17,18 and 21 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,9,12-15,18 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. This is in response to amendment filed on 6-23-04.
2. claims 1-2, 4-5, 9, 12-15, 17-18 and 21 remain for examination.

Election/Restriction

3. Claims 4, 6-8, 10-11, 13, 17, 19 and 22-52 were withdrawn from further consideration by the examiner, 37 C.F.R. § 1.142(b) as being drawn to figs. Other than 5-9 and 16. Original election was made with traverse of claims 1-3, 5-6, 9, 12-16, 18 and 21.

Claims 3, 6-8, 10-11, 16 19-20 and 22-52 are canceled with this amendment.

Applicant is reminded that **upon the cancellation of claims to a non-elected invention, the inventorship must be amended** in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

Objection to Claims

4. Claims 4 and 17 are objected as being presented in improper format.

FIRST: These claims 4 & 17 were non-elected as evidenced by prior action, and prior action of the Applicants.

SECOND: The Applicants clearly indicates that these claims are canceled on page 5, line 2 of REMARKS. However the Applicants again present these same claims as "ORIGINAL" in the body of amended claims on page 2 and 4 respectively.

THIRD: Claims 4 and 17 must be marked as non-elected, or be properly canceled in subsequent action.

Art Unit: 2655

NOTE: Typographical error is assumed and therefore non-responsive notice is not being sent so as to expedite the prosecution, since the Applicants have clearly indicated in REMARKS that these claims [4 & 17] are canceled among other non-elected claims.

Corrections are required.

5. Therefore action on elected remaining claims 1-2, 5, 9, 12-15, 18 and 21 follows.

Claim Rejections - 35 U.S.C. § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5, 9, 12-15, 18 and 21 are rejected under 35 U.S.C. § 102(b) as being anticipated by Oinoue et al., US. patent 6,044,048 (hereafter Oinoue).

As to claim 1, Oinoue discloses the invention as claimed [see Figs. 2-5] including an objective lens, a light source, light separating means, light detecting means and spot shape correction means, comprising:

an objective lens [fig. 2-3, unit 26] supported for movement [col. 4, line 65 to col. 5. line 25];

a light source [fig. 2-3, unit 21] for radiating a light beam [col. 4, line 65 to col. 5. line 25];

light separating means [fig. 2-3, unit 22-23] for separating the light beam radiated from said light source and a reflected light beam from an optical recording medium from each other [col. 4, line 65 to col. 5. line 25];

light detecting means [fig. 2-3, unit 27] for receiving said reflected light beam from said optical recording medium separated by said light separating means [col. 4, line 65 to col. 5. line 25]; and

Art Unit: 2655

spot shape correction means [fig. 2-3, units 22, 25 and 101] arranged between said objective lens and said light detecting means [col. 4, line 65 to col. 5, line 58];

said spot shape correction means correcting part or all of spots formed by said reflected light beam on said light detecting means so that the spot diameter in a direction of traversing a track on said optical recording medium will be larger than the spot diameter in a direction along said track, wherein said spot shape correction means includes a cylindrical lens [unit 101] [col. 4, line 65 to col. 5, line 58 and col. 9, lines 44-67].

7. As to claim 2, Oinoue discloses:

said spot shape correction means corrects part or all of said spots formed by said reflected light beam on said light detecting means so that the spot diameter in a direction along the track on the optical recording medium will be approximately minimum [col. 9, lines 27-67].

8. As to claim 5, Oinoue discloses:

said spot shape correction means includes a hologram device [col. 5, lines 9-18].

9. As to claim 9, Oinoue discloses:

said light detecting means for receiving said reflected light beam includes at least one set of light receiving sections, obtained on splitting, and wherein at least one of tracking error signals, address signals and clock signals is obtained by a push-pull method using said light receiving sections [col. 9, lines 63-67 and col. 10, line 42 to col. 11, line 30].

10. As to claim 12, Oinoue discloses:

divergence angle converting means [fig. 2-3, unit 23 & 25] for converting an incident numerical aperture to light separating means to a smaller value is provided between said light source and said light separating means [col. 5, lines 4-65].

11. As to claim 13, Oinoue discloses:
said divergence angle converting means includes a coupling lens [fig. 1, unit 25]
[col. 5, lines 4-65].
12. As to claim 14, it is rejected for the same reasons set forth in the rejection of
claim 1, supra.
13. As to claims 15, 18 and 21, they are claims corresponding to claims 2, 5 and 9
respectively and they are therefore rejected for the same reasons set forth in the
rejection of claims 2-5 and 9 respectively, supra.

Oinoue was cited as prior art reference in previous paper.

14. Applicant's arguments filed on 6-23-04 have been fully considered but they are
not deemed to be persuasive for the following reasons.

In the REMARKS, the Applicant argues as follows:

A) That: "Oinoue fails to identify element 101 in any of the figures. However, despite this deficiency, it is evident from the disclosure that element 101 is not a lens. Moreover, this teaching of Oinoue does not suggest that any of the alleged spot shape correction means of Oinoue are cylindrical at least because the lower half of the lens holder is not intended to hold a lens." [page 6, para. 4; REMARKS].

FIRST : The Applicants are correct that Oinoue does not explicitly show cylindrical portion 101. However from the clear description that is provided by Oinoue it is clear that this portion is cylindrical [see col. 6, line 51].

SECOND: Now as to the function of this portion it is part of the lens holder. In other words this whole device as a whole is function as a lens with its various parts. As to the argument by the Applicants that "the lower half of the lens holder is not intended

Art Unit: 2655

to hold a lens" is not found persuasive, because careful examination of the Oinoue disclosure does not indicate at all that this is the case. On the contrary 1 shows that collimator lens 25 [which is cylindrical by nature] is also part of his system [see fig. 5, and 5A]. And cylindrical lens does correct the spot.

THIRD: It is true that Oinoue does not call this portion [101] a separate lens. But the lower portion which is cylindrical in shape does function as part of the lens assembly to the extent claimed.

FOURTH: Since Oinoue is producing elliptical spot his system by definition have to have a cylindrical lens or shaped portion function as such].

B) That: "Furthermore, without the cylindrical lens included in the alleged spot shape correction means, Oinoue does not anticipate "the spot diameter in a direction of traversing a track on said optical recording medium will be larger than the spot diameter in a direction along said track," as recited in claim 1 and 14. Support for this position is evident in Fig. 5 of Oinoue, where elements 27a and 27a-1 show that although the orientation of the resulting beam spots are varied the sizes of the spots are the same." [page 7, para. 1; REMARKS].

FIRST: What is being **claimed** is that of "spot diameter being larger in direction of traversing the track". Close inspection of same fig. 5 shows that indeed spot diameter is larger in that direction. In other words the beam shape is elliptical [col. 9, lines 44-45], exactly as claimed.

SECOND: Since elliptical spot is being created by definition the system must have a cylindrical lens or portion as part of the system to create such a shape.

15. **THIS ACTION IS MADE FINAL.** See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2655

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact information

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is (703) 308-7940. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is (703) 872-9314.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To can be reached on (703) 305-4827.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-4700 or the group Customer Service section whose telephone number is (703) 306-0377.



GAUTAM R. PATEL
PRIMARY EXAMINER

Gautam R. Patel
Primary Examiner
Group Art Unit 2655

September 22, 2004